## **CLAIMS**

- 1. A method of delivering an active material to the tissue of the nasal turbinate region, comprising administering to a nostril the active material in the form of particles small enough to pass the nasal valve in a gas flow, together with a volume of gas to deliver the particles into the turbinate region, and substantially preventing further gas flow through the nostril for a predetermined time period to allow the particles to settle on the tissue.
- 2. A method as claimed in Claim 1, in which the particles have an aerodynamic diameter below about  $12.5 \mu m$ .
- 3. A method as claimed in Claim 1 or 2, in which the volume of gas exceeds the volume of the nasal vestibule but does not substantially exceed the combined volume of the nasal vestibule and the turbinate region.
- 4. A method as claimed in Claim 1, 2 or 3, wherein the active material is delivered from a device which forms a substantially gas tight seal with the nostril.
- 5. A method as claimed in Claim 1, 2, 3 or 4, in which predetermined time period is at least about 0.5 seconds.
- 6. A method as claimed in Claim 5, in which the predetermined time period is at least about 1 second.
- 7. A method as claimed in Claim 6, in which the predetermined time period is at least about 2 seconds.
- 8. A method as claimed in Claim 7, in which the predetermined time period is at least about 3 seconds.

WO 2004/093953 PCT/GB2004/001535

16

- 9. A method as claimed in Claim 8, in which the predetermined time period is at least about 4 seconds.
- 10. A method as claimed in Claim 5, in which the particles have an aerodynamic diameter of from about  $2.5\mu m$  to about  $12.5\mu m$ , and the predetermined time period is from about 30 second to about 0.5 seconds.
- 11. A method as claimed in Claim 10, in which the particles have an aerodynamic diameter from about  $4\mu$ m to about  $10\mu$ m, and the predetermined time period is from about 14 seconds to about 1 second.
- 12. A method as claimed in Claim 11, in which the particles have an aerodynamic diameter from about  $5\mu$ m to about  $9\mu$ m, and the predetermined time period is from about 9 seconds to about 1 second.
- 13. A method as claimed in Claim 12, in which the particles have an aerodynamic diameter from about  $6\mu$ m to about  $8\mu$ m, and the predetermined time period is from about 6.5 second to about 1.5 seconds.
- 14. A method as claimed in Claim 12, wherein the particles have an aerodynamic diameter of about  $5\mu m$ , and the time period is about 6 seconds.
- 15. A method as claimed in Claim 13, wherein the particles have an aerodynamic diameter of about  $7.5\mu m$ , and the time period is about 3 seconds.
- 16. A method as claimed in any preceding claim, in which less than 15% of the active material is provided in particles having an aerodynamic diameter below about  $10\mu m$ .

PCT/GB2004/001535

- 17. A method as claimed in any of Claims 1 to 15, in which at least about 25% by mass of the active material is provided in particles of the defined size.
- 18. A method as claimed in Claim 17, in which at least about 35% by mass of the active material is provided in particles of the defined size.
- 19. A method as claimed in Claim 18, in which at least about 50% by mass of the active material is provided in particles of the defined size.
- 20. A method as claimed in Claim 19, in which at least about 75% by mass of the active material is provided in particles of the defined size.
- 21. A method as claimed in Claim 20, in which at least about 90% by mass of the active material is provided in particles of the defined size.
- 22. A method as claimed in any preceding claim in which the volume of gas is between about 0.5ml and about 30mls.
- 23. A method as claimed in Claim 22, in which the volume of gas is between about 2mls and about 25mls.
- 24. A method as claimed in Claim 23, in which the volume of gas is between about 3mls and about 15mls.
- 25. A method as claimed in Claim 24, in which the volume of gas is between about 6mls and about 10mls.
- 26. A method as claimed in Claim 25, in which the volume of gas is about 5.7ml.
- 27. A method of operating a device for delivering an active material to the tissue of the nasal turbinate region, comprising providing in the device an active material in the

form of particles small enough to pass the nasal vale in a gas flow, inserting a nozzle of the device into a nostril such that the nozzle forms a substantially gas-tight seal therewith, actuating the device to deliver the active material together with a volume of gas into the turbinate region, and retaining the seal between the nozzle and the nostril for a predetermined time period to allow the particles to settle.

- 28. A device for delivering to the tissue of the nasal turbinate region an active material in the form of particles small enough to pass the nasal valve in a gas flow, comprising a nozzle for insertion into a nostril, the nozzle being arranged to form a substantially gas-tight seal with the nostril, a housing for containing the active material, a delivery means arranged to deliver the material from the nozzle in a volume of gas to the turbinate region, and means for indicating when a predetermined time period has elapsed after actuation of the delivery means, so as to allow the particles to settle on the tissue.
- 29. A device for delivering to the tissue of the nasal turbinate region an active material in the form of particles small enough to pass the nasal valve in a gas flow, comprising a nozzle for insertion into a nostril, the nozzle being arranged to form a substantially gas-tight seal with the nostril, a housing for containing the active material, a delivery means arranged to deliver the material to the nozzle in a gas flow, and means for determining when a predetermined volume of gas has passed through the nozzle to deliver the particles to the turbinate region, and substantially preventing further gas flow through the nozzle thereafter, so as to allow the particles to settle on the tissue.
- 30. A device as claimed in Claim 27, 28 or 29 in which the volume of gas exceeds the volume of the nasal vestibule but does not substantially exceed the combined volume of the nasal vestibule and the turbinate region.